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(FILE 'HOME' ENTERED AT 15:15:54 ON 12 JAN 2005)

FILE 'MEDLINE, AGRICOLA, SCISEARCH, CAPLUS, MEDICONF' ENTERED AT 15:16:09  
ON 12 JAN 2005

L1 95924 S OOPLASTOID OR OOCYTES  
L2 116795 S OOPLASTOID OR OOCYTE  
L3 24464 S ENUCLEAT? OR REMOV? (5W) NUCLE?  
L4 3847 S METAPHASE(1W) II  
L5 10542 S ZONA PELLUCIDA  
L6 1438 S L2(L)L3  
L7 27 S L2(L)L3(L)L5  
L8 8 S L2(L)L3(L)L5(L)L4  
L9 4 DUP REM L8 (4 DUPLICATES REMOVED)  
L10 17 DUP REM L7 (10 DUPLICATES REMOVED)  
L11 17 SORT L10 PY  
E LEVANDUSKI M?/AU  
L12 6 S E2  
L13 1 S E4  
L14 7 S L12 OR L13  
L15 4 S L14 AND L2  
L16 2 DUP REM L15 (2 DUPLICATES REMOVED)

=> d an ti so au ab pi 116 1-2

L16 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:473152 CAPLUS  
DN 139:19332  
TI Pluripotent stem cells derived without the use of embryos or fetal tissue  
SO U.S. Pat. Appl. Publ., 37 pp.  
CODEN: USXXCO

IN Levanduski, Mike

AB This invention provides a method for deriving precursors to pluripotent non-embryonic stem (P-PNES) and pluripotent non-embryonic stem (PNES) cell lines. The present invention involves nuclear transfer of genetic material from a somatic cell into an enucleated, zona pellucida free human ooplastoid having a reduced amount of total cytoplasm. The present invention provides a new source for obtaining human and other animal pluripotent stem cells. The source utilizes as starting materials an oocyte and a somatic cell as the starting materials but does not require the use, creation and/or destruction of embryos or fetal tissue and does not in any way involve creating a cloned being. The oocyte never becomes fertilized and never develops into an embryo. Rather, portions of the oocyte cytoplasm are extracted and combined with the nuclear material of individual mature somatic cells in a manner that precludes embryo formation. Murine, bovine, and human examples of the procedure are demonstrated. Subsequently, the newly constructed P-PNES cells are cultured in vitro and give rise to PNES cells and cell colonies. Methods are described for culturing the P-PNES cells to yield purified PNES cells which have the ability to differentiate into cells derived from mesoderm, endoderm, and ectoderm germ layers. Methods are described for maintaining and proliferating PNES cells in culture in an undifferentiated state. Methods and results are described for anal. and validation of pluripotency of PNES cells including cell morphol., cell surface markers, pluripotent tumor development in SCID mouse, karyotyping, immortality in in vitro culture.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2003113910	A1	20030619	US 2001-26420	20011219
WO 2003052080	A2	20030626	WO 2002-US40562	20021218
WO 2003052080	A3	20031127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,  
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
EP 1465992 A2 20041013 EP 2002-805209 20021218  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

L16 ANSWER 2 OF 2 MEDLINE on STN DUPLICATE 1  
AN 92389260 MEDLINE  
TI Viable embryos and normal calves after nuclear transfer into Hoechst  
stained enucleated demi-oocytes of cows.  
SO Journal of reproduction and fertility, (1992 Jul) 95 (2) 475-80.  
Journal code: 0376367. ISSN: 0022-4251.  
AU Westhusin M E; Levanduski M J; Scarborough R; Looney C R;  
Bondioli K R  
AB Bovine oocytes were bisected, stained with Hoechst 33342 and  
observed under a fluorescent microscope to identify nucleated and  
enucleated demi-oocytes. Other oocytes were bisected  
but not stained, or bisected and only half of each oocyte  
stained, and viewed under a fluorescent microscope. The oocytes  
were then used for nuclear transfer by fusing them with embryonic  
blastomeres from a 5-6 day bovine embryo. The fusion rate and proportion  
developing into compact morulae or blastocysts was compared among  
different types of demi-oocytes. Expt 1 examined the effect of  
staining and indicated no effect on either fusion rate or embryonic  
development whether or not the oocytes were stained. In Expt 2,  
stained and unstained nucleated and enucleated oocytes were  
compared. As in the first experiment, there were no differences between  
stained and unstained demi-oocytes. There was no difference  
between fusion rates of nucleated and enucleated oocytes.  
However, there was a significant difference in embryonic development  
between nucleated (10.4%) and enucleated (22.6%) demi-oocytes (P  
less than 0.05). In a final experiment, stained and unstained enucleated  
oocytes were used for nuclear transfer and the resulting embryos  
transferred into recipient cows. There was no difference in pregnancy  
rates or in the number of normal calves born whether stained or unstained  
recipient oocytes were used. Results from these experiments  
indicate that Hoechst staining and fluorescent microscopy can be used to  
identify enucleated demi-oocytes, and that these can be used for  
nuclear transfer, and result in viable embryos and normal calves. (ABSTRACT  
TRUNCATED AT 250 WORDS)